

Amendments to the Claims

Please amend Claims 41, 42, 44, 48 and 52. Please add claims 60-62. The Claim listing below will replace all prior versions of the claims in the application.

Claim Listing

1-40. (Canceled)

41. (Currently Amended) A network storage system comprising:

a plurality of storage centers each having a local file system, the storage centers located in geographically disparate locations and coupled to each other and a client through a wide area, public access network, each of the storage centers to store a plurality of files in the local file system; and

a virtual file system ("VFS") to store file system information for the local file systems, the VFS to indicate to the client a storage resource locator ("SRL") including a public access network address for a storage center accessible via the VFS and a file identifier associated with contents of the file to uniquely identify the file stored at the storage center, the client to access the storage center via the VFS over the public access network to manage the plurality of files via the VFS with the SRL.

42. (Currently Amended) A network storage system according to claim 41, further comprising a storage port at the client to access the VFS and the storage centers, the storage port to translate a client file system request to a local file system request including the file identifier to identify the file in the local file system.

43. (Previously Presented) A network storage system according to claim 42, further comprising an additional storage port at the client to access the VFS and the storage centers, the client to dynamically failover from the storage port to the additional storage port in the event of a failure of the storage port.

44. (Currently Amended) A network storage system according to claim 41, each storage center comprising:

a plurality of distributed object storage managers (DOSMs) to receive requests to access the storage center; and

a storage cluster of intelligent storage nodes to store the files of the network storage system and service access requests from the DOSMs, each intelligent node including a processor core and a plurality of storage devices.

45. (Previously Presented) A network storage system according to claim 44, each storage center to receive requests from the VFS to access the storage center according to a multi-cast protocol, to maintain file information at the DOSMs regarding files stored in said intelligent storage nodes.
46. (Previously Presented) A network storage system according to claim 44, the DOSMs further comprising a data cache to cache a file stored in the intelligent nodes.
47. (Previously Presented) A network storage system according to claim 46, the storage center further comprising a load balancing fabric to select a DOSM for an access request based at least in part on demand to access the storage center, and load in the data cache a file requested multiple times.
48. (Currently Amended) A network storage system comprising:
 - a plurality of geographically separate storage centers interconnected over a wide area, public access network with each other and with a virtual file system ("VFS") client, the storage centers having local file system management, the VFS an aggregation of the local file system managements of the storage centers; and
 - a storage port mounted at a client machine to interconnect the VFS client to the storage centers, the client machine having a local file system management, the storage port to translate a file request on the client machine from a format according to the local file system of the client machine to a file request format according to the VFS, including the storage port to generate a file identifier associated with contents of the file and a wide area network address of the storage center, the storage port to further transmit the translated file request to the storage center indicated by the wide area network address

and remotely access the identified file from the storage center over the wide area, public access network.

49. (Previously Presented) A network storage system according to claim 48, wherein the wide area, public access network comprises the Internet.
50. (Previously Presented) A network storage system according to claim 49, wherein the client file request is generated with a web browser on the client machine, and wherein the storage center wide area network address comprises an Internet address of the storage center.
51. (Previously Presented) A network storage system according to claim 48, wherein the storage port to translate the client file request and generate the file identifier and storage center wide area network address comprise the storage port to generate a HyperText Transfer Protocol ("HTTP")- compliant string to transmit over the wide area, public access network to the storage center.
52. (Currently Amended) A method for accessing files comprising:
 - receiving a file request for a file according to a format of a local file system;
 - determining that the file is stored remotely from the local file system at a geographically remote storage center;
 - translating the file request to a format of a virtual file system in response to determining that the file is stored remotely from the local file system, including generating a file identifier associated with contents of the file and an address of the storage center, the storage center coupled with the local file system over a wide area, open access network, the address of the storage center a network address of the storage center on the open access network;
 - transmitting the translated file request to the storage center over the open access network; and
 - accessing the file at the storage center over the open access network.

53. (Previously Presented) A method according to claim 52, wherein the wide area, open access network comprises the Internet.
54. (Previously Presented) A method according to claim 53, wherein translating the file request comprises generating an Internet address of the storage center and wherein accessing the file over the open access network comprises accessing the file over the Internet with a web browser.
55. (Previously Presented) A method according to claim 52, wherein translating the file request comprises generating a HyperText Transfer Protocol ("HTTP")- compliant string to transmit over the wide area, open access network to the storage center.
56. (Previously Presented) A method according to claim 52, wherein accessing the file at the storage center comprises:
 - selecting one of a plurality of distributed object storage managers (DOSMs) to service a request to access the storage center; and
 - accessing the file on an intelligent storage node of the selected DOSM.
57. (Previously Presented) A method according to claim 56, further comprising transmitting commands according to a multi-cast protocol to maintain file information at the DOSMs for files stored in the intelligent storage nodes.
58. (Previously Presented) A method according to claim 56, further comprising caching a file stored in the intelligent nodes.
59. (Previously Presented) A method according to claim 58, further comprising selecting a DOSM for an access request based at least in part on demand to access the storage center, and loading in the data cache a file requested multiple times.
60. (New) The network storage system of claim 41, wherein the file identifier includes a digital fingerprint derived from the contents of the file.

61. (New) The network storage system of claim 48, wherein the file identifier includes a digital fingerprint derived from the contents of the file.
62. (New) The method of claim 52, wherein the file identifier includes a digital fingerprint derived from the contents of the file.